

cont. A2  
a switching TFT controlling a release of the stored charges of the storage capacitor to an external circuit for display of an image of the object, the switching TFT having a gate electrode, an insulating layer on the gate electrode, an active layer on the insulating layer, and dual layered source and drain electrodes that are comprised of first source and drain electrodes made from a transparent conductive material that is in contact with the active layer and second source and drain electrodes comprised of a metal material on the first source and drain electrodes; and an ohmic contact layer disposed between said active layer and said source electrode.

A3  
9. (Amended) An optical detecting sensor according to claim 1, wherein the metal material is a substantially non-transparent metal material.

C/  
10. (Amended) An optical detecting sensor according to claim 1, wherein the transparent conducting material and the metal material each contact the ohmic contact layer.

Please **ADD** new claims 15-20.

15. A thin film transistor (TFT) sensor, comprising:

and  
a sensor TFT having a gate electrode and spaced apart first and second sensor electrodes;

A4  
a switching TFT comprised of:

a gate electrode on a transparent substrate;

an insulating layer over the gate electrode;

sub B3 Cont

a semiconductor layer on the insulating layer and adjacent the gate electrode,  
wherein the semiconductor layer includes an active layer and a contact layer;  
spaced apart first and second switching electrodes on the semiconductor layer that  
define a channel region, wherein the second switching electrode electrically contacts the contact  
layer; and  
a storage capacitor having a first storage electrode and a second storage electrode,  
wherein the second storage electrode of the storage capacitor connects to the first sensor  
electrode and to the second switching electrode;  
wherein the second switching electrode is a dual layer structure comprised of a  
transparent conducting layer that is in contact with said active layer and an opaque metal layer  
over said transparent conductive layer.

Cont.

16. A thin film transistor (TFT) sensor according to claim 15, wherein the transparent  
conducting layer also contacts the active layer.

A4 sub C3 Cont

17. A thin film transistor (TFT) sensor according to claim 16, wherein the transparent  
conducting layer contacts a side of the active layer.

sub B4

18. A thin film transistor (TFT), comprising:  
a gate electrode on a substrate;  
an insulating layer over the gate electrode;

*sub  
By  
Cont*

a semiconductor layer on the insulating layer and adjacent the gate electrode, wherein the semiconductor layer includes an active layer and a contact layer; and  
spaced apart first and second electrodes that electrically contact the contact layer so as to define a channel region;  
wherein the second electrode of the TFT is a dual layer structure comprised of a transparent conducting layer that electrically contacts the contact layer and of an opaque metal layer over the transparent conducting layer.

*Cont.*

19. A thin film transistor (TFT) according to claim 15, wherein the transparent

*AH* conducting layer contacts the active layer.

*B*

20. A thin film transistor (TFT) according to claim 19, wherein the transparent conducting layer contacts a side of the active layer.